

DRAFT
STATEMENT OF WORK
for the
Multifunctional Information Distribution System (MIDS)
Low Volume Terminal (LVT)
BU2 Retrofit
August 2015

1.0 Introduction

This Statement of Work (SOW) defines the contractor required tasks for the retrofit of the Multifunctional Information Distribution System Low Volume Receiver Transmitter Line Replaceable Unit (MIDS-LVT RT LRU) to a Block Upgrade Two (BU2) configuration including associated program management, engineering support, configuration, retrofit services and data management, logistics support and tracking of retrofitted BU2 terminals.

2.0 Applicable Documents

The contractor shall use documents specified in the basic contract as needed to meet the requirements of this SOW.

3.0 Requirements

The contractor shall manage the retrofit performed under this SOW in accordance with the requirements established herein and the basic contract. All data submitted to the Government shall be in accordance with the associated Contract Data Requirements List (CDRL) and the CDRL General Instructions

3.1 Retrofit Program Management

3.1.1 Program Manager. The contractor shall designate a single retrofit program manager who shall have overall responsibility for control and coordination of all work performed under this SOW. This manager shall act as the single focal point within the contractor's activity for all required retrofit program status information.

3.1.2 Program Planning and Control. The contractor shall identify, plan, organize, direct, coordinate, and control activities necessary to accomplish the overall retrofit contract requirements. The contractor shall establish a formal organization responsible for accomplishing the tasks outlined in this SOW. The contractor shall ensure that all plans and procedures required by the contract and the CDRLs approved by the Government, are adhered to by the contractor. A clear line of project authority shall exist between all organizational elements and the program manager.

3.1.3 Program Reviews

3.1.3.1 Program Management Reviews. The contractor shall present and administratively support the semiannual Program Management Reviews (PMR) in accordance with Attachment A of the contract and present the status of all ongoing retrofit activities. This status shall include from a retrofit program perspective, technical performance, program risks, schedule performance and plans, and retrofit metrics.

3.1.3.2 Production Readiness Review (PRR)

The Contractor shall conduct a PRR to demonstrate that they are ready for executing retrofits at each contracted retrofit location, while still being able to execute other ongoing business efforts. The purpose for the PRR is to evaluate if the contractor is ready for production terminal retrofits, and that the contractor has accomplished adequate planning to ensure that cost, schedule, retrofit turnaround time (TAT) and performance thresholds are met. The Contractor shall execute the Production Readiness Review (PRR) work identified below.

The Contractor shall develop a BU2 retrofit plan (CDRL C001) for Government assessment to include:

- Interdependencies with other programs and activities including:
 - Plan of Action and Milestones (POA&M)
 - I. Parts procurement
 - II. Test Equipment procurement and/or upgrade
 - III. Build schedule for Test Equipment
 - IV. Schedule for building New SRUs
 - V. Schedule for retrofitting SRUs
 - VI. Schedule for retrofitting RTs
 - VII. Schedule and plan for OEM personnel training
 - Government Furnished Equipment (GFE)
 - I. Vendors to identify how they will utilize/manage GFE to facilitate Retrofit TAT
 - Equipment/Facilities
 - I. Dedicated (identify what equipment and/or facilities)
 - II. Shared Resources (what is shared, functions shared with & percentages, priority/utilization management)
 - Manpower identification and loading
 - I. Dedicated (names and their roles / functions)
 - II. Shared Resources (names and the roles their time is split on, with percentages, priority/utilization management)
 - Transportation
 - I. Identify requirements, plans and processes, including documentation
 - Subcontractor plans
 - I. US and Foreign National plans and processes for the implementation of BU2 retrofit activities
 - Risk
 - I. Risk assessments and associated mitigation plans; and any potential issues

The contractor will provide status on the execution of their plan at other technical or programmatic meetings occurring under the basic contract during the period of performance.

The Contractor shall maintain and execute agreed upon Requests for Action (RFAs) and Requests for Information that are generated.

PRR Meetings

The contractor shall prepare, present, host & administratively support two (2) PRR meetings.

PRR Part One, Kick-Off

The PRR kick-off shall be hosted by the contractor three (3) MADOA. The purpose of the meeting is to for the Government to assess/validate the Contractor's readiness to execute contractual requirements IAW the process and schedule outlined in the BU2 retrofit plan. The contractor shall prepare, present, and administratively support the PRR Part One meeting including the generation of the agenda and minutes. (CDRL C002 and CDRL C003)

PRR Part Two, Readiness Review

Prior to conducting PRR Part Two, the Contractor shall support the Government's assessment team at each of the Contractors planned retrofit locations. The Government will provide the results of the Government assessment to the contractor which will identify any areas that need to be addressed by the contractor during the PRR Part Two meeting. PRR Part Two shall be hosted by the contractor 60 days prior to the start of the 1st BU2 retrofit; the contractor shall plan and notify the Government 30 days prior to that date. The purpose of the meeting is for the Government to perform a final assessment/validation of the Contractor's readiness to execute retrofits IAW contractual requirements and IAW the approved retrofit plan in parallel with existing repairs and production at any of the contractor's BU2 retrofit facilities. The contractor shall prepare, present, and administratively support the PRR Part two meeting including the generation of the agenda and minutes. (CDRL C002 and CDRL C003)

3.1.4 Quality Assurance Program.

The contractor shall implement a QA program in accordance with ISO 9001 and ISO 90003. The contractor shall apply the quality standards and specifications to:

- a. Achieve and maintain high repeatability in the MIDS production, depot repair and retrofit lines
- b. Achieve and maintain low variability in the MIDS production, depot repair and retrofit lines.
- c. Internal management processes
- d. Ensure that best commercial practices and policies are in place and there is capability to audit that these practices and policies are being followed
- e. Terminal specifications compliance and requests for waivers or deviations
- f. Acceptance test plans, procedures and reports
- g. MIDS product development
- h. Process improvement

At program reviews, the contractor shall demonstrate in detail how:

- i. Benchmarks and metrics are established and controlled to ensure repeatable results

- j. At regular intervals, that processes used will produce or are producing terminals and SRUs with low variability
- k. Internal QA processes meet all applicable Government requirements stated elsewhere in this contract

The contractor shall make available for review and retention all records associated with the establishment, implementation and operation of the quality program. The quality trends data maintained and briefed by the contractor during program reviews shall include but not be limited to the number of scrap, number of re-work dispositions, hours of re-work, number of repair dispositions, hours of repair, contractor benchmarks and quality metrics to the circuit card level.

3.1.5 Security.

The security requirements for personnel assigned under this task shall be in accordance with the requirements of OPNAVINST 5510.1 series. The highest-level security required for this task is SECRET. The work performed by the contractor will include access from UNCLASSIFIED up to SECRET information. The contractor may be required to attend meetings classified up to the SECRET level. Personnel performing classified work or requiring access to classified material or spaces under this task order shall possess both a DOD security clearance at the appropriate level and the need to know. Request for visit authorization shall be submitted in accordance with DOD 5220.22m (industrial security manual for safeguarding classified information) not later than one (1) week prior to visit. Form DD-254 of the basic contract applies. As required by NISPOM, chapter 1, section 3, contractors are required to report certain events that have an impact on the status of the facility clearance (FCL), the status of an employee's personnel clearance (PCL), the proper safeguarding of classified information, or an indication that classified information has been lost or compromised. Contractors working under MIDS program office contracts will ensure information pertaining to assigned contractor personnel are reported to the COR/TPOC, contracting specialist, and the security's COR along with notifying the appropriate agencies such as CSA, CSO, OR DODCAF when related to the denial, suspension, or revocation of a security clearance of any assigned personnel, any adverse information on an assigned employee's continued suitability for continued access to classified access; any instance of loss or compromise, or suspected loss or compromise, of classified information; actual, probable or possible espionage, sabotage, or subversive information; or any other circumstances of a security nature that would affect the contractor's operation while working under MIDS contracts.

3.1.6 Foreign Travel Requirements.

The contractor shall submit all outgoing country/theater clearance message requests to the MIDS program office administrative staff for certification of need to know: POC is Michael Alvarez; michael.h.alvarez@navy.mil for action. The contractor shall submit a request for foreign travel form for each traveler in advance of the travel to initiate the release of a clearance message at least 30 days in advance of departure.

Each contractor traveling must also submit a personal protection plan; have a level 1 Antiterrorism/force protection briefing within one year of departure and a country specific briefing within ninety (90) days of departure.

3.1.7 OPSEC Requirements.

The contractor shall perform all work in accordance with DoD and Navy Operations Security (OPSEC) requirements and in accordance with the OPSEC attachment to the DD254.

3.2 BU2 Retrofit

3.2.1 Complete Depot Retrofit

The contractor shall retrofit, test and deliver qualified MIDS-LVT Receiver Transmitter (RT), Line Replaceable Units (LRU) and Shop Replaceable Unit (SRU) in accordance with the applicable data lists. The Retrofitted hardware delivered shall be configured in the latest CFAQT hardware configuration and execute the latest GFE Computer Software Configuration Items (CSCIs) provided as executable code by the Government IAW Section H-26. MIDS-LVT RT LRU and SRU retrofits shall pass the functional portion of the Acceptance Test Procedures (ATP) prior to delivery. The contractor shall conduct all Terminal, LRU, and SRU acceptance tests using the Government approved ATP. The contractor shall retrofit the MIDS LVT RT LRUs and SRUs using qualified production and quality assurance processes, and environments in accordance with the Institute of Printed Cards (IPC) and International Standards Organization (ISO) standards.

RT LRU Acceptance Tests. The Contractor shall develop and submit RT LRU ATP (CDRL A002) for Government approval prior to RT LRU acceptance testing. The contractor shall conduct RT LRU acceptance tests in accordance with the Government approved procedures.

SRU Acceptance Tests. The Contractor shall develop and submit SRU ATP (CDRL A002) for Government approval prior to SRU acceptance testing. The contractor shall conduct SRU acceptance tests in accordance with the Government approved procedures

3.2.1.1 Complete RT Depot Retrofit

The Contractor at their depots shall retrofit MIDS-LVT RT LRUs into the MIDS-LVT BU2 configuration IAW with the latest approved MIDS-LVT BU2 Data List.

As part of the retrofit, the contractor shall perform incoming test and inspections, repairs as required, update and replace MIDS-LVT RT SRUs and miscellaneous hardware as required to retrofit incoming MIDS-LVT RT LRUs to the MIDS-LVT BU2 configuration.

3.2.1.1.1 Incoming RT LRU Inspection, Test and Repair

Upon receipt of a MIDS LVT RT LRU for retrofit, the contractor shall conduct an initial inspection and test to identify any repairs that are necessary to be conducted on the terminal prior to retrofit. Prior to retrofitting the terminal the contractor shall perform the repairs necessary in order to return the terminal into a condition required to be retrofitted. No repairs shall be made to MIDS-LVT RT SRUs that are going to be replaced by newly manufactured MIDS-LVT BU2 RT SRUs as part of the retrofit process (for example BU1 SMPs shall not be repaired).

The Incoming inspection and test shall be conducted using Government approved incoming

inspection and Test Plans and Procedures. The Contractor shall develop test plans and procedures to verify the requirements specified in Attachment E, G, L, and M of the contract. (CDRL C004)

3.2.1.2 Depot RT Retrofit

The contractor shall update incoming MIDS-LVT RT LRUs including the manufacturing, testing and installation of new SRUs IAW Paragraph 3.2.3.1.1 and retrofitting the remaining MIDS-LVT RT SRUs with required discrete HW and FW changes in accordance with the applicable Attachment F data list to bring the MIDS-LVT BU1 RT LRU up to a MIDS-LVT BU2 RT LRU configuration. The contractor shall calibrate SRUs and all applicable components. The Contractor shall execute the associated requirements outlined in paragraph 3.2 as required to support the retrofit.

3.2.1.3 SRUs modified with Hardware changes

For any SRUs requiring hardware changes, the contractor shall pass a tailored ESS for the related SRU as specified in Attachment F, Appendix A. ATP shall be developed and approved by the Government prior to the start of acceptance testing. (CDRL C007)

3.2.1.4 Outgoing retrofit acceptance testing.

The retrofitted MIDS-LVT BU2 RT LRUs shall be tested prior to being declared Ready for Issue (RFI).

3.2.1.4.1 Outgoing Acceptance Test Plans and Procedures.

The contractor shall pass the functional portion of the MIDS-LVT BU2 RT LRU Acceptance Testing using the latest Government approved ATP. Any new or modified ATP shall be developed and approved by the Government prior to the start of acceptance testing (CDRL A002).

3.2.1.4.2 Electromagnetic Compatibility Features Periodic Verification.

As part of the contractor's overall acceptance test program and before delivery of each retrofitted MIDS-LVT BU2 RT LRU, the contractor shall perform the necessary actions to ensure verification of the terminal's EMC features, in accordance with DoD 4650.1-R1. The contractor shall measure and record:

- a. The actual values of the threshold setting of the Low Level Detector (LLD)
- b. The actual value of the peak terminal output power in the three power modes
- c. A full band spectrum plot
- d. The individual pulse spectra at six frequencies (969, 1008, 1053, 1065, 1113, and 1206 MHz.) at full power mode.

The contractor shall record the measured data, items (a) through (d), as part of the terminal Acceptance Performance Test Log.

3.2.2 Complete SRU Depot Retrofit

The contractor shall retrofit the MIDS-LVT RT SRUs to the MIDS-LVT BU2 Configuration using qualified production and quality assurance processes, and environments in accordance with the Institute of Printed Cards (IPC), International Standards Organization (ISO) standards, and in

accordance with the most recent BU2 Data List.

3.2.2.1 Incoming SRU Inspection, Test and Repair

Upon receipt of a MIDS-LVT RT SRU for retrofit, the contractor shall conduct an initial inspection and test to identify any repairs that are necessary to be conducted on the terminal prior to retrofit. Prior to retrofitting the SRU(s) the contractor shall perform the repairs necessary in order to return the terminal into a condition required to be retrofitted.

The Contractor shall perform incoming inspection and test using the functional portion of the Government approved SRU ATP. Any new or modified ATP shall be developed and approved by the Government prior to the start of acceptance testing. (CDRL A002)

3.2.2.2 Depot SRU Retrofit

The contractor shall retrofit and deliver MIDS-LVT RT SRU(s) in the MIDS-LVT BU2 configuration IAW the applicable data list. The Contractor shall execute the associated requirements outlined in paragraph 3.2 as required to support the retrofit. The contractor shall calibrate SRUs and all applicable components.

3.2.2.3 Outgoing retrofit acceptance testing.

The retrofitted MIDS-LVT BU2 RT SRUs shall be tested prior to being declared RFI.

3.2.2.3.1 Outgoing Acceptance Test Plans and Procedures.

3.2.2.3.2 SRUs modified with software or Firmware changes only

The contractor shall pass the functional portion of the MIDS-LVT BU2 SRU Acceptance Testing. Any new or modified ATP shall be developed and approved by the Government prior to the start of acceptance testing. (CDRL A002)

3.2.2.3.3 SRUs modified with Hardware changes

The contractor shall pass the functional portion of the MIDS-LVT BU2 SRU Acceptance Testing. In addition the contractor shall pass a tailored ESS as specified in Attachment F, Appendix A. Any new or modified ATP shall be developed and approved by the Government prior to the start of acceptance testing. (CDRL A002, C007)

3.2.3 BU2 RT Retrofit Hardware Kits

3.2.3.1 Kit #1: New SRUs.

The Contractor shall - provide all new MIDS-LVT BU2 related SRUs required to retrofit a MIDS-LVT BU2 RT LRU to a BU2 configuration. (CLIN A010-1 to A010-4)

3.2.3.1.1 Manufacture and Test of New SRUs (Kit #1)

3.2.3.1.1.1 Manufacture of New SRUs.

Any new SRUs manufactured to support the retrofit of MIDS-LVT RT LRUs shall follow the manufacturing and quality assurance requirements of the basic contract.

3.2.3.1.1.2 Acceptance Testing of Newly Manufactured SRU for Retrofit.

All newly manufactured SRUs shall pass a full (i.e. Functional and ESS) Government approved SRU ATP(s). Any new or modified ATP shall be developed and approved by the Government prior to the start of acceptance testing. (CDRL A002)

3.2.3.1.1.3 Electromagnetic Compatibility Features Periodic Verification.

As part of the contractor's overall acceptance test program and before delivery of each retrofitted MIDS-LVT BU2 RT LRU, the contractor shall perform the necessary actions to ensure verification of the MIDS-LVT BU2 RT LRU EMC features, in accordance with DoD 4650.1-RI. The contractor shall measure and record:

- a. The actual values of the threshold setting of the Low Level Detector (LLD)
- b. The actual value of the peak terminal output power in the three power modes
- c. A full band spectrum plot
- d. The individual pulse spectra at six frequencies (969, 1008, 1053, 1065, 1113, and 1206 MHz.) at full power mode.

The Contractor shall record the measured data, items (a) through (d), as part of the terminal Acceptance Performance Test Log.

3.2.3.2 Kit #2: Retrofit Required Hardware Parts.

The Contractor shall provide all necessary hardware required to complete the retrofit of a MIDS-LVT RT Chassis to a BU2 configuration for each of the approved MIDS-LVT configurations (i.e. all required RT labels, chassis cover, lanyards, Front Panels as required for each MIDS-LVT variant (CLIN A011-1 to A011-4). The parts manufactured as part of Retrofit Kit #2 shall follow the manufacturing and quality assurance requirements of the basic contract.

3.2.4 Retrofit Services

The contractor shall retrofit, test and deliver qualified MIDS-LVT Receiver Transmitter (RT), Line Replaceable Units (LRU) and Shop Replaceable Unit (SRU) in accordance with the applicable data lists. The Retrofitted hardware delivered shall be configured in the latest CFAQT hardware configuration and execute the latest GFE Computer Software Configuration Items (CSCIs) provided as executable code by the Government IAW Section H-26. MIDS-LVT RT LRU and SRU retrofits shall pass the functional portion of the ATP prior to delivery. The contractor shall conduct all Terminal, LRU, and SRU acceptance tests using the Government approved ATP. The contractor shall retrofit the MIDS LVT RT LRUs and SRUs using qualified production and quality assurance processes, and environments in accordance with the Institute of Printed Cards (IPC) and International Standards Organization (ISO) standards.

RT LRU Acceptance Tests. The Contractor shall develop and submit RT LRU ATP CDRL A002) for Government approval prior to RT LRU acceptance testing. The contractor shall conduct RT LRU acceptance tests in accordance with the Government approved procedures.

3.2.4.1 Depot RT Retrofit Service

3.2.4.1.1 Incoming RT LRU Inspection, Test and Repair

Upon receipt of a MIDS-LVT RT LRU for retrofit, the contractor shall conduct an initial inspection and test to identify any repairs that are necessary to be conducted on the terminal prior to retrofit. Prior to retrofitting the terminal the contractor shall perform the repairs necessary in order to return the terminal into a condition required to be retrofitted. No repairs shall be made to MIDS-LVT RT SRUs that are going to be replaced by newly manufactured MIDS-LVT BU2 RT SRUs as part of the retrofit process (for example BU1 SMPs shall not be repaired).

The Incoming inspection and test shall be conducted using Government approved incoming inspection and Test Plans and Procedures. The Contractor shall develop test plans and procedures to verify the requirements specified in Attachment E, G, L, and M of the contract. (CDRL C004)

3.2.4.1.2 Depot RT Retrofit

The contractor shall retrofit incoming MIDS-LVT RT LRUs with GFE Kit #1 & Kit #2. The contractor shall also retrofit the associated SRUs with required discrete HW and FW changes in the remaining MIDS-LVT BU1 RT SRUs in accordance with the applicable data lists. The Contractor shall execute the associated requirements outlined in paragraph 3.2 as required to support the retrofit. The contractor shall calibrate SRUs and all applicable components.

3.2.4.1.3 SRUs modified with Hardware changes

For any SRUs requiring hardware changes, the contractor shall pass a tailored ESS for the related SRU as specified in Attachment F, Appendix A. ATP shall be developed and approved by the Government prior to the start of acceptance testing. (CDRL C007)

3.2.4.1.4 Outgoing retrofit acceptance testing.

The retrofitted MIDS-LVT BU2 RT LRUs shall be tested prior to being declared Ready for Issue (RFI).

3.2.4.1.4.1 Outgoing Acceptance Test Plans and Procedures.

The contractor shall pass the functional portion of the MIDS-LVT BU2 RT LRU Acceptance Testing using the latest Government approved ATP. Any new or modified ATP shall be developed and approved by the Government prior to the start of acceptance testing. (CDRL A002)

3.2.4.1.4.2 Electromagnetic Compatibility Features Periodic Verification.

As part of the contractor's overall acceptance test program and before delivery of each retrofitted MIDS-LVT BU2 RT LRU, the contractor shall perform the necessary actions to ensure verification of the MIDS-LVT BU2 RT LRU EMC features, in accordance with DoD 4650.1-R1. The contractor shall measure and record:

- a. The actual values of the threshold setting of the Low Level Detector (LLD)
- b. The actual value of the peak terminal output power in the three power modes
- c. A full band spectrum plot
- d. The individual pulse spectra at six frequencies (969, 1008, 1053, 1065, 1113, and

1206 MHz.) at full power mode.

The contractor shall record the measured data, items (a) through (d), as part of the terminal Acceptance Performance Test Log.

3.2.5 Field Retrofit Services

The Contractor shall retrofit and test MIDS-LVT RT LRUs in accordance with the latest changes identified in the approved MIDS-LVT BU2 Data List at one of their facilities or at a Government designated facility. The Contractor shall be responsible for providing all of the tools necessary to retrofit and RFI a MIDS-LVT RT LRU to a MIDS-LVT BU2 configured terminal IAW the requirements outlined below.

3.2.5.1 Customer's Facility Retrofit

As part of the retrofit the contractor shall perform incoming test and inspections to the MIDS-LVT RT LRU and update and replace MIDS-LVT RT SRUs (Kit #1) and (Kit #2) to retrofit Government provided LRUs to a MIDS-LVT BU2 configuration.

The Government will be responsible for the repairs of any SRUs not included in Kit#1. Any MIDS-LVT RT SRUs being replaced with MIDS-LVT RT SRUs contained in Kit#1 shall be provided to the Government representative at that related site. Any MIDS-LVT RT SRUs that are suspected failures shall be so marked and reported in the Contractor Database as such.

3.2.5.1.1 Incoming RT LRU Inspection Test and Repair

Upon receipt of a MIDS LVT RT LRU for retrofit, the contractor shall conduct an initial inspection and test to identify any repairs that are necessary to be conducted on the terminal prior to retrofit.

Prior to retrofitting the terminal the contractor perform the repairs, that they are able to execute on site, necessary in order to return the terminal into a condition required to be retrofitted.

The Incoming inspection and test shall be conducted using Government approved incoming inspection and Test Plans and Procedures. The Contractor shall develop test plans and procedures to verify the requirements specified in Attachment E, G, L, and M of the contract. (CDRL C004)

No repairs shall be made to MIDS-LVT RT SRUs that are going to be replaced by newly manufactured MIDS-LVT BU2 RT SRUs as part of the retrofit process (for example BU1 SMPs shall not be repaired).

The Government will be responsible for addressing failures of any MIDS-LVT RT SRUs not included in Kit#1.

3.2.5.2 Field RT Retrofit

The contractor shall retrofit MIDS-LVT RT LRUs with Government Furnished Equipment (GFE) Kit #1, Kit #2 and SRUs. The contractor shall also retrofit the associated SRUs with required SW and FW changes in the remaining MIDS-LVT BU1 RT SRUs. All retrofits will be done IAW with the latest approved MIDS-LVT BU2 Data List. The Contractor shall execute the

associated requirements outlined in paragraph 3.2 as required to support the retrofit. The contractor shall calibrate SRUs and all applicable components.

3.2.5.3 Outgoing Retrofit Acceptance Testing

The retrofitted MIDS-LVT BU2 RT LRUs shall be tested prior to being declared RFI.

3.2.5.3.1 Outgoing Acceptance Test Plans and Procedures.

The contractor shall pass the functional portion of the MIDS-LVT BU2 RT LRU Acceptance Testing using the latest Government approved ATP. Any new or modified ATP shall be developed and approved by the Government prior to the start of acceptance testing (CDRL A002).

3.2.5.4 Other Contractor's Facility Retrofit

The Contractor at their depots shall retrofit MIDS-LVT RT LRUs into the MIDS-LVT BU2 configuration IAW with the latest approved applicable Attachment F Data List.

As part of the retrofit the contractor shall perform incoming test and inspections, repairs as required, update and replace MIDS-LVT RT SRUs and miscellaneous hardware as required to retrofit incoming MIDS-LVT RT LRUs to the MIDS-LVT BU2 configuration.

3.2.5.4.1 Incoming RT LRU Inspection, Test and Repair

Upon receipt of a MIDS-LVT RT LRU for retrofit, the contractor shall conduct an initial inspection and test to identify any repairs that are necessary to be conducted on the terminal prior to retrofit. Prior to retrofitting the terminal the contractor shall perform the repairs necessary in order to return the terminal into a condition required to be retrofitted. No repairs shall be made to MIDS-LVT RT SRUs that are going to be replaced by newly manufactured MIDS-LVT BU2 RT SRUs as part of the retrofit process (for example BU1 SMPs shall not be repaired).

The Incoming inspection and test shall be conducted using Government approved incoming inspection and Test Plans and Procedures. The Contractor shall develop test plans and procedures to verify the requirements specified in Attachment E, G, L, and M of the contract. (CDRL C004)

3.2.6 Depot RT Retrofit

The contractor shall update incoming MIDS-LVT RT LRUs including the manufacturing, testing and installation of new SRUs IAW Paragraph 3.2.3.1.1 and retrofitting the remaining MIDS-LVT RT SRUs with required discrete HW and FW changes in accordance with the applicable data lists to bring the MIDS-LVT BU1 RT LRU up to a MIDS-LVT BU2 RT LRU configuration. The Contractor shall execute the associated requirements outlined in paragraph 3.2 as required to support the retrofit. The contractor shall calibrate SRUs and all applicable components.

3.2.6.1 SRUs modified with Hardware changes

The contractor shall pass the functional portion of the MIDS-LVT BU2 SRU Acceptance Testing. In addition the contractor shall pass a tailored ESS as specified in Attachment F,

Appendix A. Any new or modified ATP shall be developed and approved by the Government prior to the start of acceptance testing. (CDRL A002, C007)

3.2.6.2 Outgoing retrofit acceptance testing.

The retrofitted MIDS-LVT BU2 RT LRUs shall be tested prior to being declared Ready for Issue (RFI).

3.2.6.2.1 Outgoing Acceptance Test Plans and Procedures.

The contractor shall pass the functional portion of the MIDS-LVT BU2 RT LRU Acceptance Testing using the latest Government approved ATP. Any new or modified ATP shall be developed and approved by the Government prior to the start of acceptance testing. (CDRL A002)

3.2.6.2.2 Electromagnetic Compatibility Features Periodic Verification.

As part of the contractor's overall acceptance test program and before delivery of each retrofitted MIDS-LVT BU2 RT LRU, the contractor shall perform the necessary actions to ensure verification of the terminal's EMC features, in accordance with DoD 4650.1-RI. The contractor shall measure and record:

- a. The actual values of the threshold setting of the Low Level Detector (LLD)
- b. The actual value of the peak terminal output power in the three power modes
- c. A full band spectrum plot
- d. The individual pulse spectra at six frequencies (969, 1008, 1053, 1065, 1113, and 1206 MHz.) at full power mode.

The contractor shall record the measured data, items (a) through (d), as part of the terminal Acceptance Performance Test Log.

3.2.7 Disposition and Accounting of Replaced SRUs During Retrofit

The contractor shall retain custody of all MIDS-LVT RT SRUs accumulated via direct replacement of new MIDS-LVT BU2 RT SRUs (Kit #1) during the retrofit process. Replaced SRUs shall be identified and tracked in the Contractor Database as functional or non-functional. Disposition requires direction from the Government.

3.2.8 Controlled Cryptographic Items (CCI)

The contractor shall handle and store all CCI in accordance with COMSEC Regulations including DoD 5220.22-M, the National Industrial Security Program and Operating Manual (NISPOM) and the National Security Agency Central Security Service (NSA/CSS) Policy Manual No. 3-16. An accounting of all retained CCI related SRUs shall be maintained.

3.2.9 Retrofit Turn-around Time

MIDS-LVT RT LRUs and SRUs shall be retrofitted within 60 calendar days of their receipt at the contractor's facility. MIDS-LVT RT LRUs shall be retrofitted within 45 calendar days if Government provided seed assets are utilized to retrofit incoming RT LRUs. Government seed assets are defined as MIDS-LVT RT SRUs provided by the Government for the contractor to

retrofit ahead of any related MIDS-LVT RT LRU induction for the retrofit of any incoming MIDS-LVT RT LRU. MIDS-LVT RT LRUs and MIDS-LVT SRUs that need repair prior to being inducted for retrofit shall be allowed an additional 45 calendar days.

3.3 Contractor Database

The Contractor shall enter and maintain accurate and timely configuration, reliability, maintainability, and delivery data in a single, consolidated database for all MIDS LVT hardware, including repair and retrofit assets. At a minimum, the database shall include the data fields listed in Appendix A of Attachment A. For all hardware produced by the Contractor and sold under any previous and current Government contract(s), if applicable, the database shall also include the information provided within the DD Form 250 and DD Form 1149 data fields. The database shall be accessible to the Government via the Internet and shall provide the Government with real-time status for all related information.

3.4 Configuration Management.

The Contractor shall identify a Point of Contact (POC) for all MIDS-LVT BU2 retrofit configuration management and control matters. The Contractor shall perform Configuration Management (CM) in accordance with their CM Processes and the IPO MIDS LVT Configuration and Data Management Plan (CDMP), and the guidance of MIL-HDBK-61A, ANSI/EIA-649, and IEEE/EIA 12207. The Contractor shall meet as required with the Government to conduct CM coordination meetings to discuss CM related actions and status.

3.4.1 Configuration Identification.

Configuration identifiers shall be assigned to each retrofitted Configuration Item (CI). The Contractor shall ensure configuration traceability for all equipment, components, computer software, firmware and spares delivered under this contract. Configuration identifiers shall be maintained consistent with the definitions outlined in MIL-HDBK-61A, for all hardware/firmware CIs and computer software configuration items (CSCIs) throughout the life of the program.

3.4.2 Item Unique Identifier (IUID) Additions and Updates

The Contractor shall ensure that all assets are accurately registered in the IUID Registry. All assets previously registered shall have the original IUID registration updated following completion of the Retrofit. If assets were not registered, they shall be registered following completion of the MIDS-LVT RT LRU and MIDS-LVT SRU BU2 Retrofit. The contractor shall deliver all retrofitted assets with valid IUID Labels.

3.4.3 Serialization and Short Title

All retrofitted MIDS-LVT BU2 RT LRUs shall maintain full serial number integrity and reflect modification of authorized nomenclatures per applicable DoD and NSA regulations.

3.4.4 Nomenclature.

The approved Government configuration nomenclature details are contained in the Joint Electronic Type Designation Automated System (JETDAS) database in accordance with MIL-STD-196F for

all MIDS-LVT Radio Terminal Sets and LRUs. The BU-2 nomenclature is a modification of the existing MIDS-LVT nomenclatures described for BU 1. Modifications affect the system Radio Set Level and RT LRUs only and are indicated by adding a revision letter A after the existing type designation code, e.g. AN/USQ-140A(V)1(C), and RT-1840A(C)/U.

3.4.5 Part Numbers

The Contractor shall ensure that the correct part numbers for each CI at the System, LRU, and SRU levels are utilized. The contractor's part numbering system for HWCi part numbers and CSCI program names with version numbers shall ensure traceability to the approved baseline documents in the applicable data lists.

The contractor shall ensure upgraded Terminals, LRUs, and SRUs are correctly marked/labelled with the applicable part numbers assigned to the upgraded CIs and that the labels accurately include the externally loadable CSCI version(s) installed.

3.4.6 Labels

The contractor shall affix appropriate labels and markings to all retrofitted MIDS-LVT RT BU2 LRUs and SRUs prior to delivery.

3.5 POC

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